



## **Inhalants - find out about them before your children do!**

### **What are they?**

In short, inhalants are breathable chemical vapors that produce mind-altering effects. Kids are quickly discovering that common household products, such as glue and canned whipped cream, hair spray and air fresheners, are inexpensive and easy to obtain. They inhale directly from product containers, from fabric soaked in solvents, or from paper or plastic bags filled with gases. Names for this activity include huffing, sniffing, snorting and bagging.

### **Who's using them?**

Most parents are unaware of the growing popularity of inhalant use. A 1996 national survey estimated that, nationwide, there were 12.5 million children abusing inhalants. Young people ages 7-17 are most likely to be users. According to NIH's National Institute of Drug Abuse, 6-8% of high school seniors reported using inhalants. Even more frightening is the young age many children start abusing inhalants - children as young as 5 have been found to be experimenting with them. A NIH survey in 1997 showed that over 20% of 8<sup>th</sup> graders had tried inhalants. This confirms what others have found - that the highest rate of inhalant abuse appears to be among 12-13 year olds. After middle school, it is believed that many inhalant abusers either progress to alcohol and/or drug use, or drop out of school and are thus missed in surveys. Most inhalant abuse seems to occur after school. Children with low self-esteem are particularly vulnerable.

## Why do they do it?

The user (abuser) often gets an intoxicating effect like a dizzying rush that lasts anywhere from a few minutes to an hour. Increased dosages can create a feeling of inhibition. Because many of the products are inexpensive, commonly available and legal, they have become quite popular. While a majority of kids merely try them out through the urging of friends, a small percentage become chronic abusers. However, any experimentation can prove deadly.

## What are the health concerns?

While most inhalants give the child a brief high, they can also have side effects which vary in severity depending upon factors that include the product, dosage, period of use, surroundings, and the child's physiology and personality. Some common effects include nausea, sneezing, coughing, nosebleeds, lack of coordination and appetite, and decreased heart and breathing rates. More serious ones are hallucinations, convulsions, vomiting, violent behavior, loss of consciousness, permanent brain damage, liver and kidney damage, loss of hearing, and even sudden death due to cardiac arrest or suffocation. Use of inhalants by teen drivers has been known to lead to serious accidents, sometimes causing fatalities.

Inhalant use can become addictive. Treatment facilities for inhalant users are rare and difficult to find. Users suffer withdrawal symptoms and a high rate of relapse. They require thirty to forty days or more of detoxification and follow-up treatment. Researchers suggest that chronic or long-term inhalant abusers are among the most difficult to treat and they may experience multiple psychological and social problems.

## What products are being abused?

Most abused products fall into three categories - solvents, gases and nitrites.

**Solvents:** industrial and household solvents including paint thinners, degreasers (such as dry-cleaning fluids), gasoline and glues and art or office supply solvents including correction fluid, felt-tip marker fluid and keyboard cleaners. Gasoline and model glue are among the products most frequently abused.

**Gases:** butane lighters, propane tanks, whipping cream aerosols or dispensers and refrigerant gases, aerosol propellants in spray paints, hair and deodorant sprays and fabric protector sprays, medicinal aesthetic gases such as chloroform, halothane and nitrous oxide (laughing gas).

**Nitrites:** including cyclohexyl nitrite, amyl nitrite and butyl nitrite.

## Warning signs, symptoms

Because there are many factors involved, warning signs and symptoms vary. Here are some of the more common ones:

- Disappearance or unusual consumption of any of the products listed above
- Breath and clothing that smell of chemicals
- Spots and sores around the nose and mouth, paint or stains on body or clothing
- Disruptive, violent activity or other antisocial behavior, such as withdrawal from family and friends
- School delinquency

- Drunk, dazed or glassy-eyed look, lack of coordination, slurred speech
- Nausea, loss of appetite, severe headaches
- Rapid pulse, irregular heartbeat, difficulty breathing
- Depression or paranoia
- Anxiety, excitability, irritability, mood swings, personality changes

### What can a parent do?

Because the abused products are inexpensive and readily available, this is a difficult problem to combat. But, there are some steps you can take to decrease the risk.

- **Education** - Learn more about this danger (see sources of additional information below). Teach your children the dangers of inhalants (it's never too early); help them to develop defense mechanisms to counteract peer pressure. Advocate that the dangers of inhalants be included in school curricula.
- **Personal involvement** - Nothing can substitute increased parental involvement. Know what your children are doing and who is supervising their activities. This is especially important after school. Help build their self-esteem.
- **Alternative products** - Some household products that are abused as inhalants can be removed from the house and replaced with more benign ones (see box); others can be safeguarded by keeping them in a locked cabinet.
- **Seek professional help** - If you find that your child is an inhalant abuser, seek professional intervention as soon as possible.

#### **Alternative Household Products**

Numerous organizations and state and local governments issue lists of alternative products. Here are a few.

Tenn. Valley Authority:

<http://es.eps.gov/techinfo/facts/safe-fs>

Illinois Environmental Protection Agency:

[www.epa.gov/grtlakes/seahome/housewaste/src/alt2](http://www.epa.gov/grtlakes/seahome/housewaste/src/alt2)

New Hampshire Department of Environmental Services: [www.des.state.nh.us/factsheets/hw/hw-12](http://www.des.state.nh.us/factsheets/hw/hw-12)

Santa Clara County (CA):

<http://es.epa.gov/new/contacts/newsltrs/shopping>

### Where can I get more information or help?

- National Inhalant Prevention Coalition: call 1-800-269-4237 or visit [www.inhalants.org](http://www.inhalants.org)
- National Institute on Drug Abuse, National Institutes of Health: call 1-888-644-6432 or visit [www.nida.nih.gov](http://www.nida.nih.gov)
- Dictionary of Slang Drug Terms: [www.tcada.state.tx.us/research/slang/inhalants](http://www.tcada.state.tx.us/research/slang/inhalants)

**For more information on EPA Region III's Children's Health Program**, contact Gail Tindal (215-814-2069, [tindal.gail@epa.gov](mailto:tindal.gail@epa.gov)) or Dan Welker (215-814-2744, [welker.dan@epa.gov](mailto:welker.dan@epa.gov)).